

Please amend the claims so that they read as follows:

1. (Currently Amended) A semiconductor wafer examination system comprising:

a defect classification device adapted to pick up an image of the surface (defect image) of a defective semiconductor wafer, compare the defect image with an image of the surface of a normal semiconductor wafer (normal image), identify each defective area isolated as characteristic area of a defect in the defect image on the basis of the outcome of the comparison and defect detection parameters for defining threshold value for defects and automatically determine the type of defect according to the characteristic quantity of the defective area on the basis of a knowledge base for determining the type of defect according to the characteristic quantity of the defective area; and

a classification support device including

a classification means for identifying the defective area of a plurality of defective images on the basis of the normal image and the defect detection parameters and classifying the identified defective areas,

a defective area displaying means for displaying the plurality of defective areas as classified by said classification means,

an editing means for editing the defect detection parameters on the basis of the defective areas displayed by said defective area display;

said editing means including defect detection parameter read means for reading out from a defect parameter storage device, defect detection parameter selection means so as to select for all the defect parameters and defect detection parameter manual selection means so that values may be selected individually by the user on the basis of the defect detection parameter shown on the defective area display means,

a classification result re - instruction editing ~~re-instructing~~ means for manually re - classifying the result of classification of the defective areas obtained by said classification means, if the result of classification obtained by the detected defect classification means on the basis of the known knowledge base is wrong or the detected data can not be automatically classified by the detected defect classification means, and

a selection means for selecting classified defect image data for preparing the knowledge base from the plurality of defective areas as classified by the classification result re - instruction editing ~~re-instructing~~ means.